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MONOPHONIC PEBBLING NUMBER OF SOME STANDARD GRAPHS

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Abstract: Assume G is a graph with some pebbles distributed over its vertices. A pebbling move is when two pebbles are removed from one vertex, one is thrown away, and the other is moved to an adjacent vertex. The monophonic pebbling number, $\mu(G)$, of a connected graph G, is the least positive integer n such that any distribution of n pebbles on G allows one pebble to be carried to any specified but arbitrary vertex using monophonic path by a sequence of pebbling operations. The monophonic pebbling number of cycle graphs, fan graphs, wheel graphs, star graphs, complete graphs, middle graphs of path are being discussed.

Keywords and Phrases: Monophonic pebbling number, monophonic distance, monophonic path.

2020 Mathematics Subject Classification: 05C12, 05C25, 05C38, 05C76.

1. Introduction and Preliminaries

Pebbling, introduced by Lagarias and Saks, has sparked a lot of interest. F. R. K. Chung [2] was the first to put it into the literature, and many others have followed suit, including Hulbert, who published an overview of graph pebbling [4]. A lot has happened since Hulbert's survey first appeared in graph pebbling. Graph